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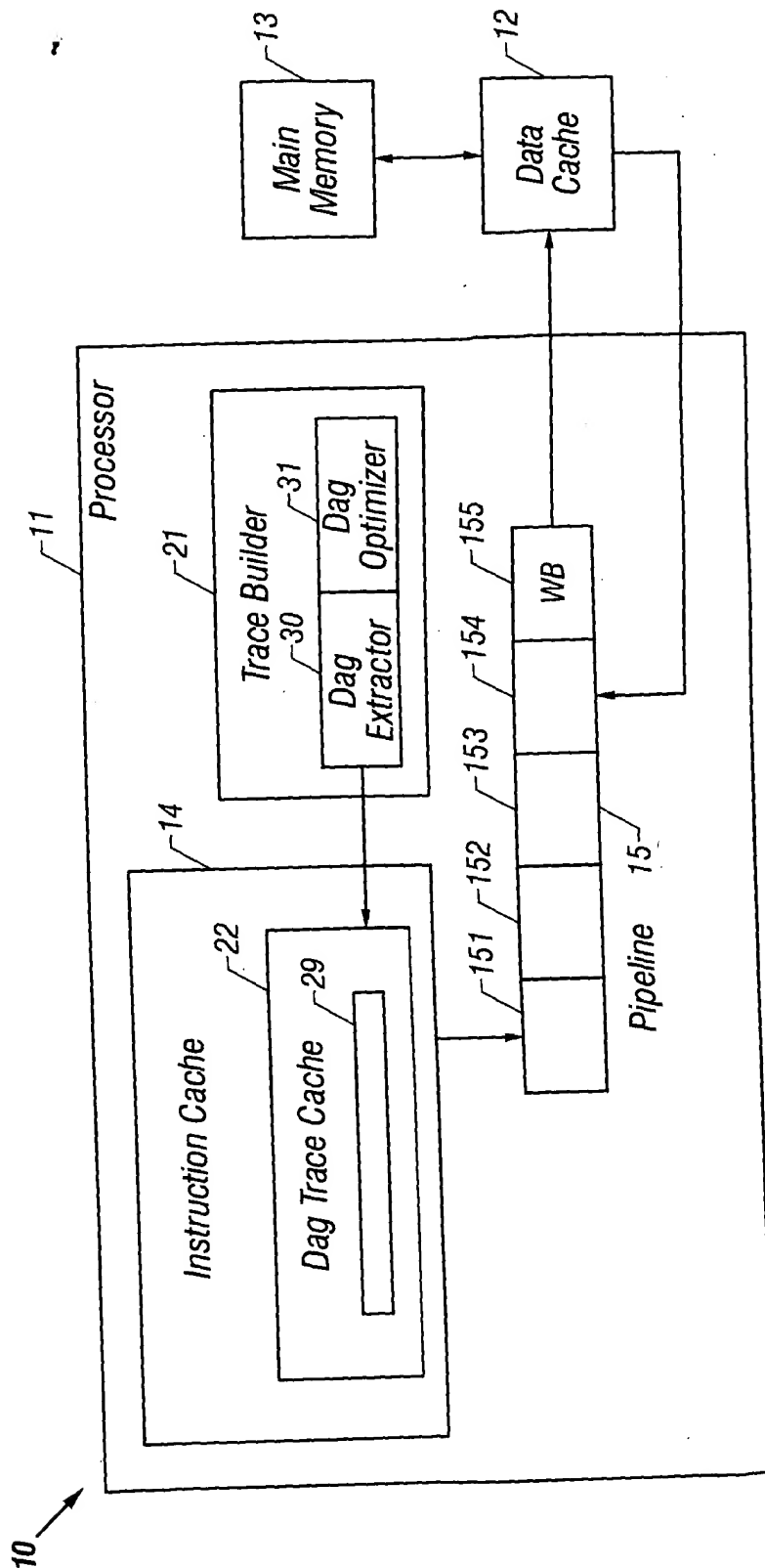


FIG. 1

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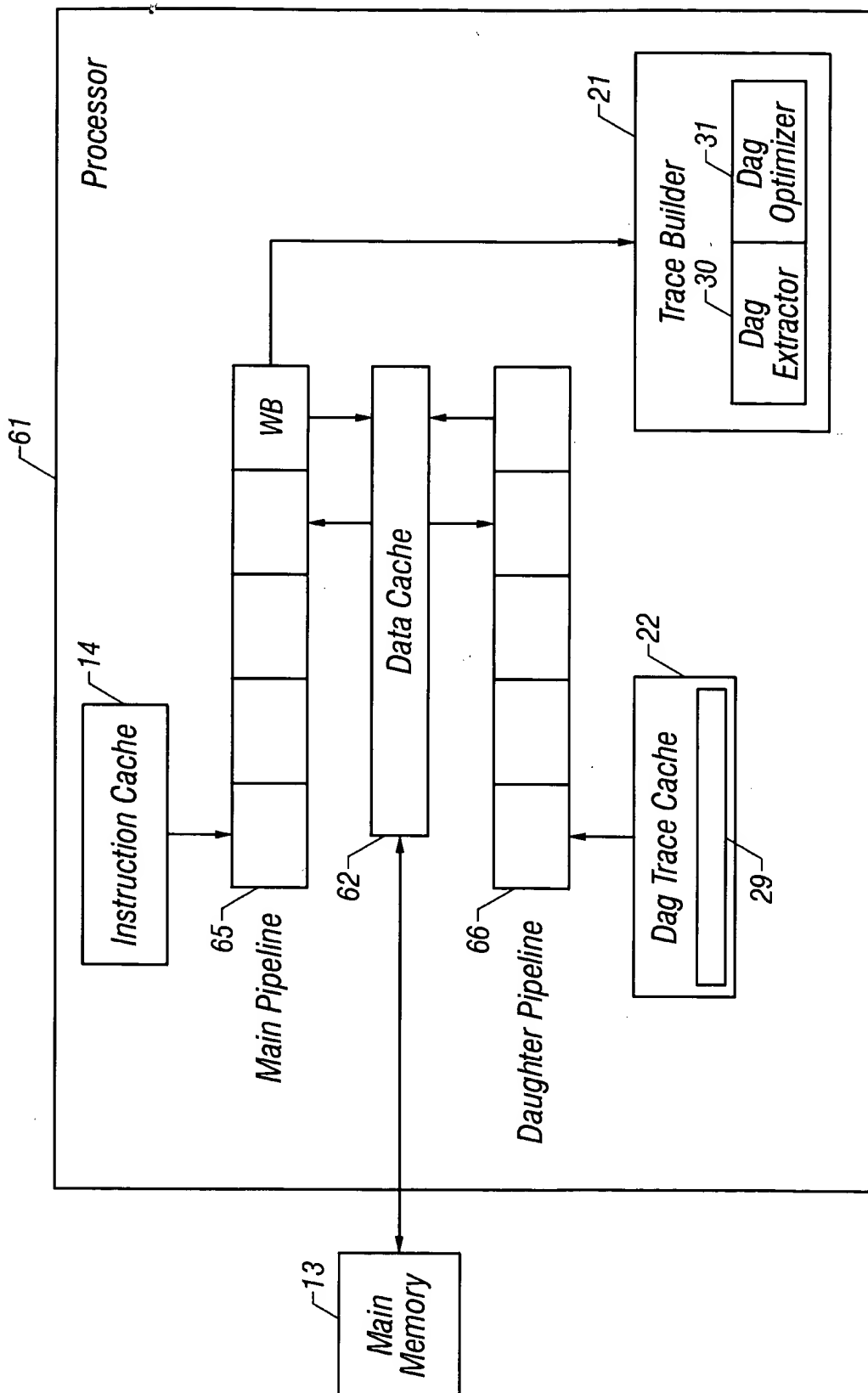


FIG. 2

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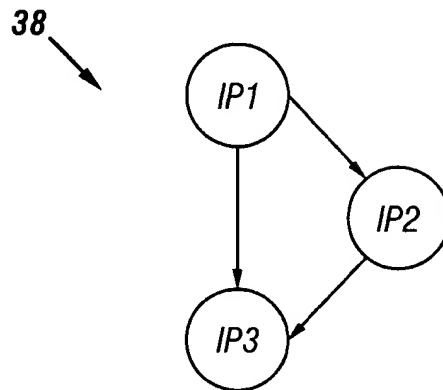


FIG. 3A

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| LINE | IP / LINE | IP  | P | C | Type |
|------|-----------|-----|---|---|------|
| 0    | IP        | IP1 | 0 | 1 | --   |
| 1    | LINE      | 3   | 0 | 1 | --   |
| 2    | LINE      | 6   | 0 | 0 | --   |
| 3    | IP        | IP2 | 1 | 0 | --   |
| 4    | LINE      | 0   | 0 | 1 | --   |
| 5    | LINE      | 6   | 0 | 0 | --   |
| 6    | IP        | IP3 | 1 | 0 | --   |
| 7    | LINE      | 0   | 0 | 1 | --   |
| 8    | LINE      | 3   | 0 | 0 | --   |

FIG. 3B

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HOT 41

| Triggering Condition | Count | Frequency Threshold | Confidence Metric | Criterion Instruction | BOT 42 | EOT 43 |
|----------------------|-------|---------------------|-------------------|-----------------------|--------|--------|
| 410                  | 411   | 412                 | 413               | 414                   |        |        |
|                      |       |                     |                   |                       |        |        |

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FIG. 4

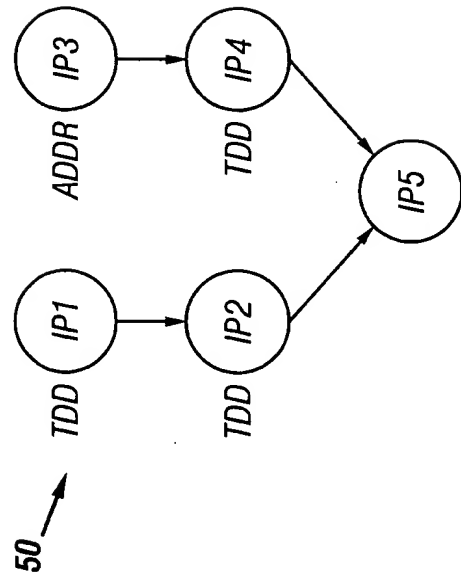


FIG. 5

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*Function WalkAndClassifyDAG (Node N)*  
    *Process (N, no\_hint)*  
    *Foreach Parent P of N*  
        *WalkAndClassifyDAG (P)*  
    *End Foreach*  
*End Function*

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↙

*Function Process (Node N, Hint H)*  
    *If H = ADDR Then*  
        *If (N->type = TDD) Then*  
            *N-> Type = ADDR*  
        *End If*  
        *Foreach Parent P of N*  
            *Process (P, ADDR)*  
        *End Foreach*  
    *Else If N->instruction = Load Then*  
        *N-> Type = ADDR*  
        *Foreach Parent P of N*  
            *IF P-> output\_operand = N->address\_operand Then*  
                *Process (P, ADDR)*  
            *End If*  
        *End Foreach*  
    *Else If N->instruction = BRANCH Then*  
        *N-> Type = CF*  
    *Else*  
        *N->Type= TDD*  
    *End If*  
*End Function*

**FIG. 6**